Message Text

LIMITED OFFICIAL USE

PAGE 01 STATE 304194 ORIGIN EB-08

INFO OCT-01 EUR-12 EA-10 NEA-10 ISO-00 IO-13 FAA-00 DOTE-00 SIG-01 MMO-01 CAB-02 CIAE-00 COME-00 DODE-00 INR-07 NSAE-00 L-03 AF-10 ARA-10 /088 R

DRAFTED BY EB/OA/AVP:JSGRAVATT/FAA:RSNORTH:PMA

APPROVED BY EB/OA/AVP:AJWHITE

EUR/EE: SFROMOWITZ

EA/RA:LMCNUTT

IO/TRC:CHARTLEY

NEA/RA:DMORRISON

FAA:JLOOS

DOT/TPI-42:MALLENINFO.)

-----121322 220808Z /11

R 212205Z DEC 77

FM SECSTATE WASHDC

TO AMEMBASSY BANGKOK

AMEMBASSY BELGRADE

AMEMBASSY BUCHAREST

AMEMBASSY BUDAPEST

AMEMBASSY COLOMBO

AMEMBASSY ISLAMABAD

AMEMBASSY JAKARTA

AMEMBASSY KABUL

AMEMBASSY KUALA LUMPUR

AMEMBASSY MANILA

AMEMBASSY NEW DELHI

USLO PEKING

AMEMBASSY PRAGUE

AMEMBASSY SEOUL

AMEMBASSY SINGAPORE

AMEMBASSY TOKYO

AMEMBASSY WARSAW

AMEMBASSY WELLINGTON

INFO AMEMBASSY MOSCOW

AMCONSUL MONTREAL LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 STATE 304194

AMEMBASSY OTTAWA

LIMITED OFFICIAL USE STATE 304194

E.O. 11652: N/A

TAGS: EAIR, ICAO

SUBJECT: U.S. TRSB MICROWAVE LANDING SYSTEM AND ICAO ALL-WEATHER OPERATIONS DIVISIONAL MEETING, MONTREAL, APRIL 4-21, 1978

- 1. U.S. IS PARTICIPATING ACTIVELY IN INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) PROGRAM TO SELECT NEW NON-VISUAL LANDING APPROACH AND GUIDANCE SYSTEM AS INTERNATIONAL STANDARD FOR WORLDWIDE AVIATION USE. NEW SYSTEM NORMALLY REFERRED TO AS MICROWAVE LANDING SYSTEM (MLS) WOULD EVENTUALLY REPLACE INSTRUMENT LANDING SYSTEM (ILS). AIM IS TO PROVIDE ADVANCED LANDING GUIDANCE SYSTEM CAPABLE OF MEETING AVIATION COMMUNITY'S NEEDS FOR NEXT 25 YEARS.
- 2. EXTENSIVE ICAO TECHNIQUE ASSESSMENT PROGRAM HAS BEEN IN PROGRESS OVER LAST SEVERAL YEARS. U.S., AFTER MAJOR RESEARCH AND DEVELOPMENT PROGRAM UNDERTAKEN BY FAA, SUBMITTED TIME REFERENCE SCANNING BEAM (TRSB) SYSTEM TO ICAO AS ITS CANDIDATE FOR INTERNATIONAL ADOPTION. U.K., FEDERAL REPUBLIC OF GERMANY AND AUSTRALIA HAVE ALSO PROPOSED TECHNIQUES, U.S. AND AUSTRALIAN PROPOSALS ARE TOTALLY COMPATIBLE. U.K. DOPPLER MLS IS THE MAIN COMPETITOR WITH U.S. TRSB AND WE UNDERSTAND

LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 STATE 304194

U.K. WILL BE ACTIVE IN SEEKING WORLDWIDE SUPPORT FOR DOPPLER.

- 3. ICAO ALL WEATHER OPERATIONS PANEL (AWOP) OF EXPERTS CHARGED BY ICAO WITH TASK OF CONDUCTING ASSESSMENT, RECOMMENDED TRSB OVER OTHER CANDIDATE SYSTEMS IN MARCH 1977. U.S. TECHNIQUE SUBMISSION TO ICAO WAS RESULT OF EXHAUSTIVE, COSTLY EVALUATION OF SEVERAL TECHNIQUES IN U.S. FAA BELIEVES THAT TRSB SYSTEM HAS MANY ADVANTAGES OVER OTHERS PRINCIPALLY IN AREAS OF PERFORMANCE AND RELIABILITY. U.S. CANDIDATE SYSTEM CAN BE PRODUCED BY ANY OF SEVERAL U.S. MANUFACTURERS AND FOREIGN LICENSEES IMMEDIATELY AND LENDS ITSELF TO EASE OF MANUFACTURE BY ANY ELECTRONIC EQUIPMENT MANUFACTURER. ICAO REPORT OFAWOP VI SUBSTANTIATES THESE FINDINGS ALTHOUGH REPORT REFLECTS HOTLY CONTESTED OUTCOME.
- 4. ICAO WILL CONVENE WORLDWIDE ALL WEATHER OPERATIONS (AWO) MEETING AT MONTREAL IN APRIL 1978. USG WANTS TO ENSURE THAT GOVERNMENTS ATTENDING THIS MEETING ARE KNOWLEDGEABLE AS TO WHAT MLS AND ITS BENEFITS ARE AND ARE FAMILIAR WITH U.S. TRSB TECHNIQUE, SO THAT HOPEFULLY

THEY WILL BE PREPARED TO SUPPORT U.S. SYSTEM. UNLESS OBJECTION PERCEIVED, ADDRESSEE MISSIONS ARE REQUESTED MAKE APPROPRIATE EFFORTS ACQUAINT HOST GOVERNMENT CIVIL AVIATION AUTHORITIES WITH U.S. MLS PROGRAM. INFORMATION BEING AIR POUCHED MISSIONS PROVIDES DESCRIPTIONS OF U.S. MLS TECHNIQUE AND U.S. PROGRAM FOR USE IN APPROACHES. IN VIEW APRIL TIMING OF ICAO MEETING, POSTS REQUESTED TO APPROACH APPROPRIATE HOST GOVERNMENT OFFICIALS ON THIS SUBJECT AS EARLY AS POSSIBLE SINCE COMPETITIVE ATMOSPHERE PREVAILS WITH OTHER SYSTEM PROPOSERS, PARTICULARLY THE U.K.

5. FOLLOWING IS LIST OF QUESTIONS AND SUGGESTED ANSWERS WHICH POSTS MAY DRAW ON IF ASKED: LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 04 STATE 304194

(A) WHAT IS THE U.S. POSITION ON EXTENSION OF THE ILS PROTECTION DATE (I.E. THE DATE UNTIL WHICH ICAO WILL CONTINUE TO RECOGNIZE ILS AS AN INTERNATIONAL STANDARD)?

THE U.S. RECOGNIZES THE CONTINUED NEED FOR ILS FOR MANY YEARS AND THE FACT THAT IT IS NOW PROVIDING USEFUL SAFE SERVICE. IT IS BELIEVED THAT MANY ICAO MEMBER STATES AGREE WITH THIS VIEW. THEREFORE, THE U.S. IS PLANNING TO PROTECT THE ILS AND WILL SUPPORT ITS CONTINUED USE. WE ANTICIPATE A NEW ILS PROTECTION DATE INTO THE 1990'S.

- (B) WHAT IS THE CONTROVERSY ON THE U.S. SIMULATION OF DOPPLER PERFORMANCE AT THE BRUSSELS AIRPORT?
 BRUSSELS AIRPORT WAS USED TO DEVELOP A GENERAL AIRPORT CONFIGURATION SCENARIO CONSIDERED BY THE ICAO ALL WEATHER OPERATIONS PANEL DURING ITS ASSESSMENT. THE COMPUTER SIMULATION STUDY UNDERTAKEN FOR THE U.S. BY LINCOLN LABS INDICATED THAT CERTAIN BUILDING ORIENTATIONS ON AIRPORTS CAN GENERATE DOPPLER MLS REFERENCE SCALLOPING AND RESULT IN AZIMUTH ERRORS. THE OFFICIAL BRUSSELS AIRPORT CHARTS USED TO DEVELOP THE SIMULATION INDICATED A BUILDING THAT SUBSEQUENTLY WAS SHOWN NOT TO EXIST. THE U.K. THEN DENOUNCED THE ACCURACY AND RELIABILITY OF THE SIMULATION. NEVERTHELESS THE PRINCIPLE REMAINS, UNDER CERTAIN AIRPORT CONFIGURATIONS THE POSSIBILITY OF AZIMUTH ERROR PROBLEM WITH THE DOPPLER MLS EXISTS.
- (C). WHAT IS U.S. POSITION ON SIDE BY SIDE TESTING OF LLK AND U.S. SYSTEMS?

THE FAA HAS EXPRESSED A WILLINGNESS TO CONDUCT COMPARATIVE TESTS OF THE U.S. AND U.K. SYSTEMS, HOWEVER THEY CAN BE LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 05 STATE 304194

ARRANGED AND PROVIDED THEY DO NOT DELAY THE ICAO SELECTION PROCESS.

(D) WHAT ARE THE RELATIVE COSTS OF THE U.K. AND U.S. SYSTEMS?

THE ICAO AWOP VI REPORT CONTAINS CONCLUSIONS ON THE RELATIVE COST OF TRSB EQUIPMENT VERSUS DOPPLER EQUIPMENT. FINDINGS WERE FAVORABLE TO TRSB; HOWEVER, THE SUBJECT IS COMPLEX AND MISSIONS SHOULD REFER INTERESTED PERSONS TO AWOP VI REPORT OR REFER QUESTIONS BACK TO DEPARTMENT.

- 6. MISSIONS SHOULD:
- (1.) SEEK SUPPORT OF HOST GOVERNMENTS FOR U.S. SYSTEM ADVISING THEM THAT
- A) U.S. SYSTEM HAS ADVANTAGE OVER OTHER SYSTEMS IN PERFORMANCE AND IMPLEMENTABILITY;
- B) U.S. SYSTEM HAS BEEN TESTED EXTENSIVELY UNDER ACTUAL OPERATING CONDITIONS WITH HIGHLY SUCCESSFUL RESULTS;
- C) TRSB CAN MEET THE NEEDS OF LOW DENSITY AS WELL AS HIGH DENSITY AIRPORTS.
- (2.) ENCOURAGE THOSE OFFICIALS FAVORABLY DISPOSED TO U.S./AUSTRALIAN SYSTEM TO BE PRESENT TO VOTE AT MONTREAL MEETING.
- (3.) ADVISE DEPARTMENT SOONEST WHETHER HOST GOVERNMENTS WILL BE REPRESENTED AT ICAO, AWO MEETING NEXT APRIL.
- (4.) BE ALERT TO AND REPORT ON CONTINUING BASIS ANY U.K. ACTIVITY ON MLS ISSUE IN HOST COUNTRIES. VANCE LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 06 STATE 304194

LIMITED OFFICIAL USE

	Margaret P. Grafeld	Declassified/Released	US Department of State	EO Systematic Review	22 May 2009
NNN					

Message Attributes

Automatic Decaptioning: X

Capture Date: 01-Jan-1994 12:00:00 am Channel Indicators: n/a **Current Classification: UNCLASSIFIED**

Concepts: MEETINGS Control Number: n/a Copy: SINGLE Sent Date: 21-Dec-1977 12:00:00 am

Decaption Date: 01-Jan-1960 12:00:00 am Decaption Note:

Disposition Action: RELEASED Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW

Disposition Comment: 25 YEAR REVIEW
Disposition Date: 22 May 2009
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1977STATE304194
Document Source: CORE
Document Unique ID: 00
Drafter: JSGRAVATT/FAARSNORTH:PM

Drafter: JSGRAVATT/FAA:RSNORTH:PMA

Enclosure: n/a Executive Order: N/A Errors: N/A

Expiration: Film Number: D770477-0436

Format: TEL From: STATE

Handling Restrictions: n/a

Image Path:

ISecure: 1

Legacy Key: link1977/newtext/t19771230/aaaaayya.tel Line Count: 217

Litigation Code IDs: Litigation Codes:

Litigation Codes. Litigation History: Locator: TEXT ON-LINE, ON MICROFILM Message ID: 551b16ff-c188-dd11-92da-001cc4696bcc Office: ORIGIN EB Original Classification: LIMITED OFFICIAL USE Original Handling Restrictions: n/a Original Previous Classification: n/a Original Previous Handling Restrictions: n/a

Page Count: 4
Previous Channel Indicators: n/a

Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a

Reference: n/a Retention: 0

Review Action: RELEASED, APPROVED Review Content Flags: Review Date: 24-Nov-2004 12:00:00 am

Review Event: Review Exemptions: n/a **Review Media Identifier:** Review Release Date: n/a Review Release Event: n/a **Review Transfer Date:** Review Withdrawn Fields: n/a

SAS ID: 155852 Secure: OPEN Status: NATIVE

Subject: U.S. TRSB MICROWAVE LANDING SYSTEM AND ICAO ALL-WEATHER OPERATIONS DIVISIONAL MEETING, MONTREAL, APRIL 4-21,

TAGS: EAIR, ICAO BELGRADE MULTIPLE To: BANGKÓK

Type: TE

vdkvgwkey: odbc://SAS/SAS.dbo.SAS_Docs/551b16ff-c188-dd11-92da-001cc4696bcc

Review Markings: Margaret P. Grafeld Declassified/Released **US** Department of State EO Systematic Review 22 May 2009

Markings: Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 22 May 2009